3/21/88 A2500-2

Paper Paperboard & Wood Pulp

MONTHLY STATISTICAL SUMMARY - Vol. 66 No. 2 FEBRUARY 1988

PAPER AND BOARD PRODUCTION: NEW HIGHS IN 1988

In the early weeks of 1988 the demand for paper and paperboard maintained the momentum achieved in 1987, holding production near its fourth quarter 1987 highs.

January 1988 production was 6.4 million tons, a new high for that month, and only a shade below the highest monthly total ever, posted in August 1987. The seasonally adjusted rate was 75.0 million tons per year, slightly above the average for all of 1987. Current data indicate that production is holding near the January rate.

Paper: Printing and writing papers continued to be strong. Coated paper shipments in January were 11.6% ahead of their year-ago level, just about matching capacity. Uncoated free paper shipments -- the white papers used in books, office copy and computer papers and stationery -- were 7% above their year-earlier level. The strong demand for these papers reflected the high rates of output of commercial printers, along with continued large volumes of paper consumed by businesses generally on copiers and computers.

Both new and unshipped orders for printing papers have remained at high levels. The backlog of unshipped orders has stayed firm at about 1.6 million tons, levelling after a strong rise during the middle months of 1987.

Newsprint and tissue paper production was close to respective year-ago levels, but demand for unbleached kraft papers continued to drift downward. The January, 1988 unbleached kraft paper total was only slightly above its fourth quarter 1987 low, but 6% below its year-ago level. The year-to-year weakness was centered on the bag and sack grades, with the other grades holding up fairly well.

Paperboard: Paperboard production increased even more strongly than paper, with its January, 1988 total 4% above that of a year-ago. The strongest demands continued in the containerboard grades, with total linerboard production up 5.6% and total corrugating medium up 4.4%. Exports of linerboard also showed an impressive gain.

On a seasonally adjusted basis, shipments of corrugated shipping containers were 4.2% above their comparable 1987 level.

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Inventories of containerboard at mills and plants showed a strong increase in January, but the 5.8 weeks of supply as of the end of January 1988 were virtually unchanged from their year-ago figure.

Production of the boxboard grades followed a flatter trend. Total folding boxboard production was down by 1.5% from its January 1987 level, while production of the milk carton and food service grades fell 5%. Total bleached paperboard production held close to its year-ago level, as demand was buoyed by non-packaging uses. Recycled paperboard production showed a small gain, largely reflecting higher demand for recycled linerboard and corrugating medium.

FIBROUS MATERIALS

Shipments of chemical paper grade market wood pulp in January, 1988, at 549,000 short tons, were 19% below their December 1987 high, but 11.7% above their year-ago level. Producers' inventories rose 68,000 tons in January, 1988, to 16 days of supply, compared to 20 days of supply at the end of January 1987 and 12 days at the end of that year. Shipments to the domestic market just about equalled their year-ago level, but export shipments, particularly to Japan and the Asian/African countries, rose sharply.

Total 1987 shipments of chemical paper grade market wood pulp were 6,864,000 tons, a new high and 5.3% above the 1986 record. Production also reached a new high -- 6,806,000 tons -- and inventories fell by 58,000 tons, to 12 days of supply. Shipments to the domestic market showed only a 2% gain, but export shipments rose 7.8%. The major increases in exports were in shipments to the Latin American and Asian/African countries.

SALES AND EARNINGS

Total sales of 27 paper and allied products companies reported in the press for the fourth quarter of 1987 rose by 15.3% from their fourth quarter 1986 total while after-tax profits gained 61%. Sales of these companies account for about two-thirds of the total for all paper and allied products companies.

The ratio of after-tax profits to sales in the fourth quarter of 1987 was 6.8%. While a high for the 1980's this figure was in line with the trend of the ratios for these companies in the 1970's.

These fourth quarter totals brought 1987 sales 21.8% above their 1986 level. After-tax profits, which gained 62.2%, were 6.4% of sales, compared to 4.8% in 1986.

The four forest products companies with major pulp, paper and paperboard capacity showed similar sales and earnings trends. While their fourth quarter gains from year-ago levels were somewhat different from those of the paper and allied products companies -- a 24.4%

Continued on page 11

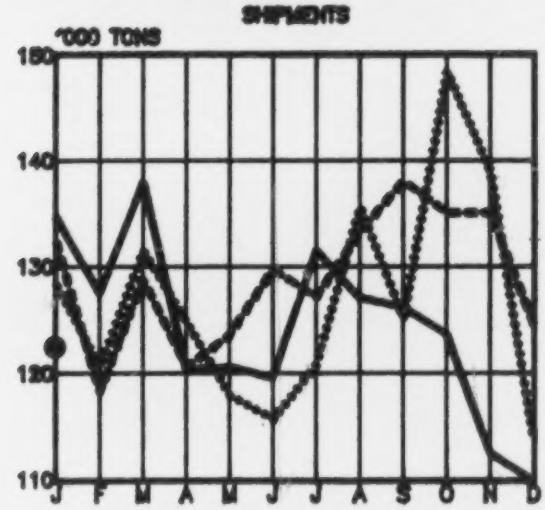
PAPER AND PAPERBOARD STATISTICS

PRODUCTION, SHIPMENTS AND ORDERS
(Thousands of Short Tons)

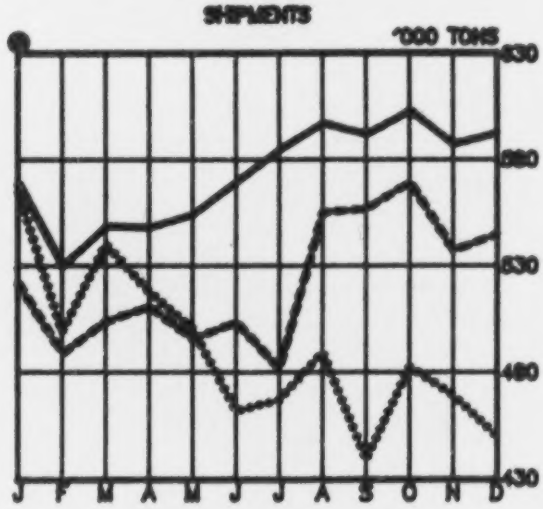
	YEAR 1986	YEAR 1987	OCTOBER 1987 (P)	NOVEMBER 1987 (P)	DECEMBER 1987 (P)	JANUARY 1988 (P)	Annual Rate Y-T-D 1988	% Change From same Period Last Year
PAPER								
Newsprint - Production	5,630	5,842	508	482	499	499	5,983	1.7
- Shipments	5,638	5,854	502	484	508	482	5,783	2.4
Printing & Writing Sum (R)	19,625	20,750	1,813	1,723	1,784	1,804	21,653	6.6
Groundwood Paper - Shipments	1,540	1,491	124	112	110	122	1,462	-9.4
- New Orders	1,553	1,548	121	113	128	127	1,519	-9.5
Unfilled Orders	124	179	150	153	179	175	175	54.1
Coated Papers - Shipments	6,263	6,869	603	587	592	634	7,604	11.6
- New Orders	6,334	7,107	610	563	615	623	7,475	12.2
Unfilled Orders	469	739	729	693	739	679	679	43.9
Unctd Free Sheet - Shipments	10,410	10,983	967	907	960	929	11,142	6.1
- New Orders	10,485	11,195	1,029	919	979	929	11,151	8.9
- Unfilled Orders	587	778	726	738	778	761	761	43.1
Thin Papers - Shipments (R)	271	251	21	20	23	20	235	-9.9
Cotton Fiber Paper - Shipments	152	161	14	13	12	13	157	-1.1
Bleached Bristols - Production	900	995	85	84	87	88	1,052	9.8
Tissue Paper - Production	5,095	5,300	455	442	449	436	5,228	-0.6
Total Packaging & Other Paper	5,117	5,068	435	419	432	436	5,227	-3.3
Unbl. Kraft Paper - Shipments	3,303	3,075	259	243	261	262	3,149	-6.3
Other Paper - Production	1,814	1,993	176	176	171	173	2,078	-3.9
TOTAL PAPER-Production-Unadj. (R)	35,466	36,959	3,211	3,066	3,164	3,174	38,091	3.0
-Production-S.A.			3,095	3,098	3,101	3,104	37,245	3.3
PAPERBOARD - PRODUCTION								
Solid Wood Pulp Furnish	27,336	28,900	2,405	2,330	2,474	2,507	30,384	4.2
Total Unbl. Kraft Paperboard	17,689	18,888	1,566	1,527	1,642	1,638	19,653	6.2
Unbl. Kraft Linerboard (1)	16,402	17,608	1,485	1,443	1,531	1,528	18,332	5.2
Production for Export	2,246	2,268	176	139	217	205	2,464	13.5
Other Unbl. Kraft Paperboard	1,287	1,281	81	84	111	110	1,322	21.2
Semichemical Paperboard	5,376	5,606	474	458	459	488	5,860	1.3
Production for Export	213	186	13	11	12	10	118	-37.8
Solid Bleached Paperboard	4,271	4,406	365	345	382	381	4,571	-0.3
Production for Export	569	564	43	46	47	45	544	-5.1
Recycled Paperboard	8,083	8,594	772	739	691	744	8,922	3.8
Production for Export	70	60	5	9	6	6	70	177.8
TOTAL PAPERBOARD-Prod.-Unadj.	35,419	37,493	3,177	3,069	3,165	3,251	39,006	4.1
- Containerboard Prod.(Dom. Use)	21,426	23,026	1,970	1,938	1,947	2,000	23,995	5.2
- Boxboard Prod.(Dom. Use) (2)	5,903	6,178	538	505	515	537	6,443	-2.9
- All Other P'bd Prod.(D.U.) (2)	4,992	5,210	433	420	421	448	5,373	5.8
- Total Paperbd Prod. for Export	3,097	3,079	236	206	282	266	3,195	8.0
TOTAL PAPERBOARD PROD.- S.A.			3,159	3,169	3,179	3,142	37,710	4.1
TOTAL PAPER AND PAPERBOARD								
Production - Unadj. (R)	70,885	74,452	6,390	6,146	6,342	6,425	77,098	3.2
Production - S.A.			6,261	6,276	6,292	6,246	74,955	3.2

(1) Includes all exports of kraft paperboard. R - Revised P - Preliminary S.A. - Seasonally Adjusted
(2) Data for unbl. kraft folding boxboard incl. in All Other P'bd.

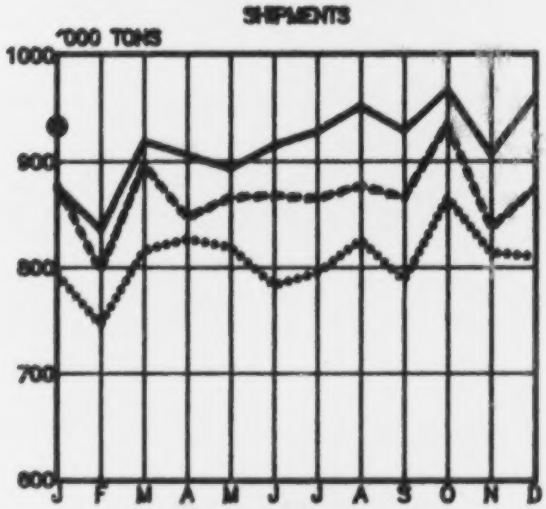
GROUNDWOOD PAPER, UNCOATED
SHIPMENTS



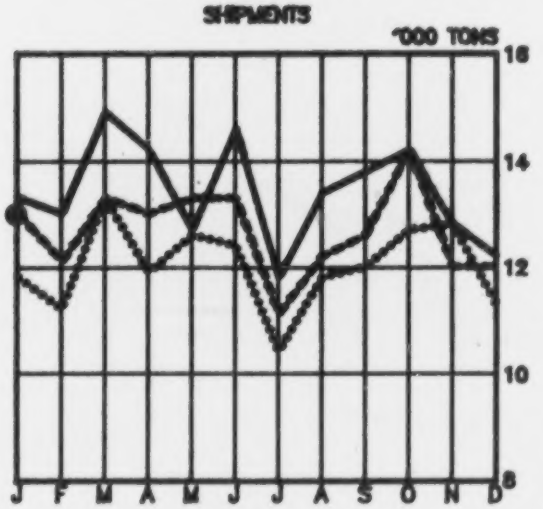
COATED PAPER
SHIPMENTS



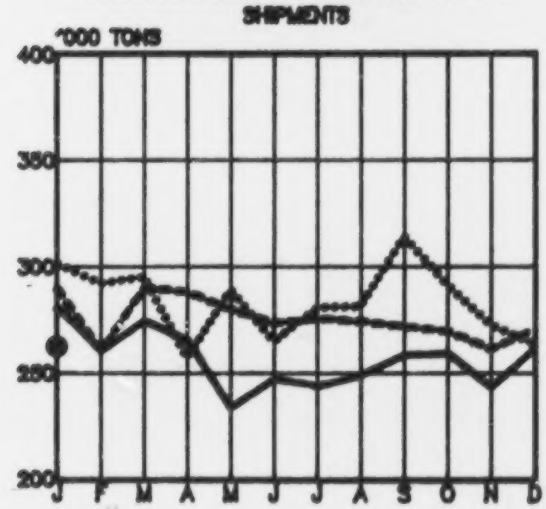
UNCOATED FREE SHEET PAPERS
SHIPMENTS



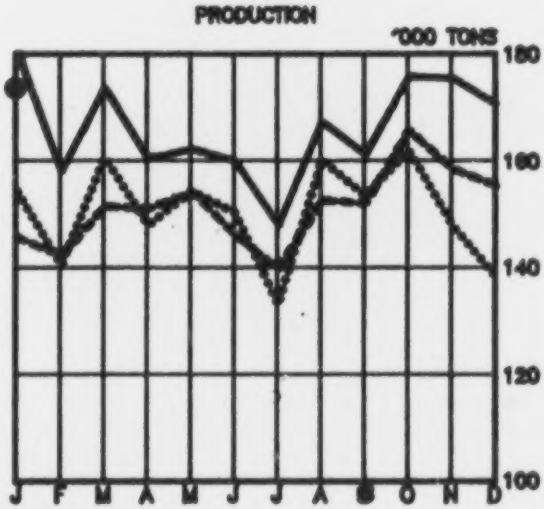
COTTON FIBER PAPER
SHIPMENTS



UNBLEACHED KRAFT PACKAGING
AND INDUSTRIAL CONVERTING PAPER
SHIPMENTS



OTHER PAPER
PRODUCTION



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WOOD PULP STATISTICS
(Thousands of Tons)

	YEAR 1985	YEAR 1986	SEPTEMBER 1987	OCTOBER 1987	NOVEMBER 1987	DECEMBER 1987	Annual Rate Y T D 1987	% Change from Same Period Last Year
TOTAL WOOD PULP					R	P		
Total Wood Pulp - Production	54,147	57,817	4.925	5,866	4,812	5,160	59,582	4.5
- Imports	4,466	4,582	432	386	401	415	4.850	5 9
- Exports	3,791	4,458	442	333	365	527	4,889	9.7
- New Supply	54,821	57.140	4.915	5.119	4.848	5.048	59.543	4 2
Dissolving Pulp - Production	1,174	1.258	112	88	137	109	1,312	4.3
- Imports	175	255	19	19	9	9	198	-22.4
- Exports	631	711	65	53	61	72	752	5.7
- New Supply	718	801	66	54	85	45	757	-5.5
Paper Grades - Production	43,696	46,881	3,947	4,110	3 851	4,227	48,310	4.8
Chemical Pulp - Imports	4,184	4.220	391	345	376	378	4 456	5 6
- Exports	3,131	3,689	376	278	301	449	4,111	11.5
- New Supply	44,668	46.612	3.963	4.176	3,925	4 156	48.655	4 4
Groundwood and - Production	5,251	5,487	506	501	472	484	5,714	4.1
Thermo-Mech. - Imports	187	198	22	23	17	28	197	83.1
- Exports	29	59	1	2	3	5	26	-54.9
- New Supply	5.489	5.536	527	523	486	507	5.885	6.3
Semi-Chemical - Production	4.827	4,191	359	367	352	339	4,246	1.3
- Imports								
- Exports								
- New Supply	4,827	4.191	359	367	352	339	4.246	1 3
MARKET WOOD PULP								
Total Market - Production	6.800	7,583	680	670	670	723	8.128	7.2
Wood Pulp - Imports	2,791	3.122	292	267	260	293	3,235	3.6
- Exports	3,784	4.470	469	383	317	528	4.816	7.7
- New Supply	5,807	6,235	503	554	613	488	6 547	5.0
Dissolving Pulp - Production	1,172	1,251	112	88	137	109	1,308	4 5
- Imports	174	212	15	14	8	8	154	-27.4
- Exports	667	718	88	56	47	88	775	8 0
- New Supply	679	745	40	46	99	29	687	-7.8
Paper Grades - Production	5.613	6.315	566	581	532	613	6 805	7 8
Chemical Pulp - Imports	2,531	2,831	269	240	246	272	[illegible]	5.1
- Exports	3,117	3,752	381	327	270	440	4 [illegible]	7.7
- New Supply	5,028	5,394	454	494	508	444	5.743	6.4
Groundwood Pulp - Production	15	17	1	1	1	1	14	-14.6
and All Other - Imports	86	79	8	13	6	14	106	33.7
- Exports	1	0	0	0	(0)	(0)	(0)	0.0
- New Supply	100	96	9	14	7	15	120	25.5

SOURCES Total Wood Pulp Production & Market Wood Pulp Production, Imports & Exports - Pulp Division, Pulp, Materials and Technology Group, API. Total Wood Pulp Imports & Exports - Department of Commerce.

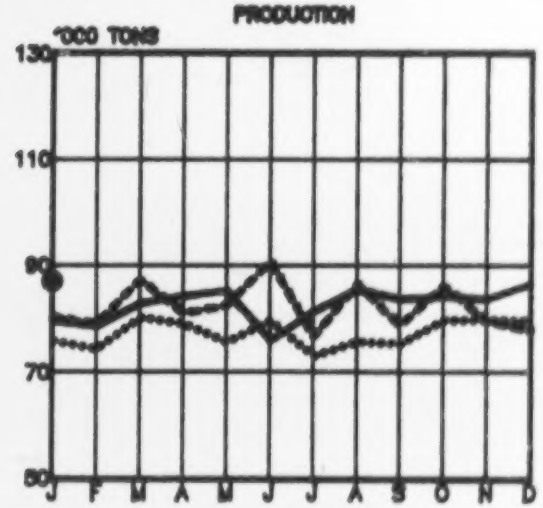
FIBROUS RAW MATERIALS
(Thousands of tons)

CONSUMPTION AT PAPER & PAPERBOARD MILLS					R	P		
Total	69,781	73,556	6.449	6.630	6.310	6.544	77,092	4.8
Total Wood Pulp	54,047	56,320	4,905	5,012	4,756	5,055	58,744	4.3
Waste Paper	15,734	17.236	1,544	1,619	1,553	1,489	18.348	6 5
INVENTORIES								
Chemical Paper Grade Market Pulp								
Producers Own-Use Inventories	165	174	167	161	162	170	170	-2.6
Producers' Market Inventories	485	284	273	267	290	224	224	-21.8
Consumers Purchased Inventories	534	496	561	531	499	529	529	6 7
Waste Paper at Paper & Bd. Mills	976	838	818	838	817	887	887	5.9
Days of Supply at Pulp Mills of Chemical Paper Grade Mkt Pulp	30	16	14	14	15	12	12	-25.0

SOURCES: Wood Pulp Data, Pulp Division, Pulp, Materials and Technology Group, API. Waste Paper Data, Paper Recycling Committee, API.
P - Preliminary; R - Revised; (0) - Indicates zero to five-hundred short tons

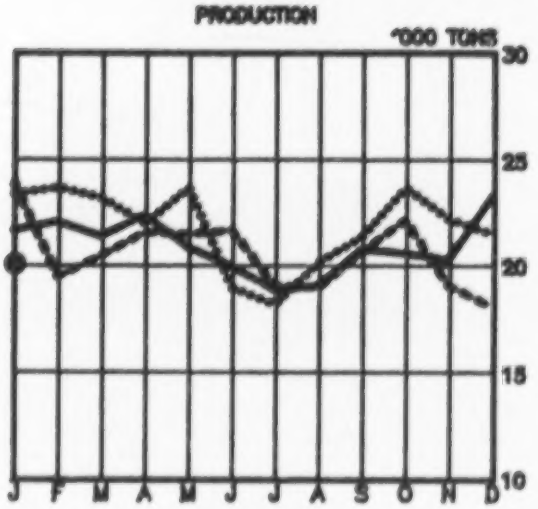
BLEACHED BRISTOLS

PRODUCTION



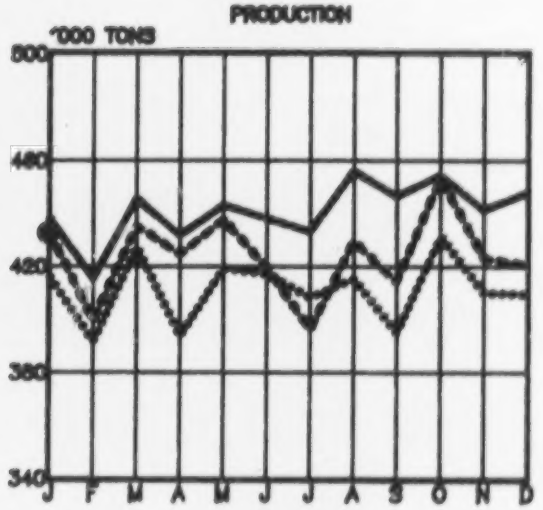
THIN PAPER

PRODUCTION



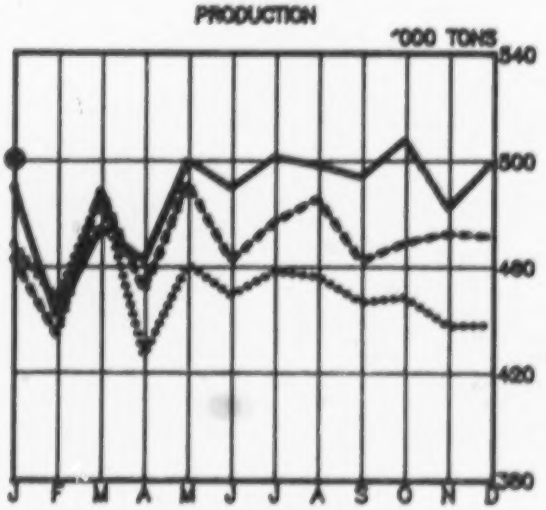
TISSUE PAPER

PRODUCTION



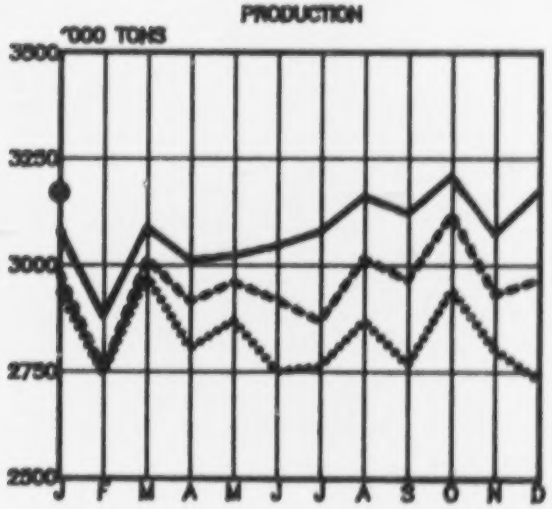
NEWSPRINT

PRODUCTION



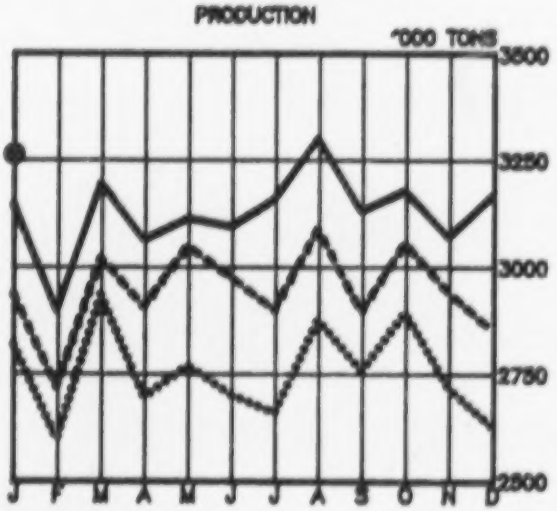
TOTAL PAPER

PRODUCTION



TOTAL PAPERBOARD

PRODUCTION



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F I B R O U S R A W M A T E R I A L S
(Thousands of Standard (128 cubic foot) Cords)

		YEAR 1985	YEAR 1986	SEPTEMBER 1987	OCTOBER 1987	NOVEMBER 1987	DECEMBER 1987	Annual Rate Y-T-D 1987	% Change From Same Period Last Year
PULPWOOD									
Total U.S.	- Total Receipts	85,499	90,963	8,061	8,436	7,227	8,883	94,312	3.7
	- Total Consumpt	85,744	91,434	7,856	7,984	7,481	8,162	93,946	3.7
	- Residues *	30,464	32,755	2,848	3,029	2,649	2,782	32,899	0.4
	- Inventories	5,846	4,794	5,844	5,381	5,211	5,896	5,896	6.3
So. Atlantic	- Total Receipts	27,589	29,513	2,826	2,814	2,462	2,660	31,147	5.5
	- Total Consumpt	27,815	29,425	2,773	2,685	2,466	2,692	30,915	5.1
	- Residues *	7,978	9,343	912	915	820	820	9,553	2.2
	- Inventories	1,117	994	1,114	1,256	1,248	1,211	1,211	21.8
Northeast	- Total Receipts	7,438	7,277	565	592	513	598	6,941	-4.6
	- Total Consumpt	7,394	7,227	539	599	559	578	7,189	-1.4
	- Residues *	1,539	1,419	129	134	126	131	1,543	8.7
	- Inventories	544	484	514	542	587	594	594	22.7
South Central	- Total Receipts	29,786	31,798	2,813	2,975	2,564	2,968	33,658	5.9
	- Total Consumpt	29,914	32,113	2,698	2,787	2,582	2,996	33,859	2.9
	- Residues *	9,287	9,792	819	867	771	884	9,992	2.8
	- Inventories	1,198	926	1,188	1,363	1,317	1,294	1,294	39.7
North Central	- Total Receipts	6,438	6,571	539	632	487	573	6,552	-0.3
	- Total Consumpt	6,296	6,738	536	618	563	568	6,764	0.5
	- Residues *	1,298	1,842	189	165	117	152	1,263	21.2
	- Inventories	884	892	857	883	815	838	838	-7.8
West	- Total Receipts	14,264	15,792	1,338	1,423	1,281	1,284	16,022	1.5
	- Total Consumpt	14,325	15,939	1,310	1,383	1,231	1,336	16,899	1.8
	- Residues *	10,458	11,159	879	948	815	795	10,548	-5.5
	- Inventories	1,303	1,498	1,379	1,257	1,324	1,167	1,167	-22.1

* - Consumption of Residues in Cord Equivalents. SOURCE: American Pulpwood Association 26-Feb-88

U N I T E D S T A T E S T R A D E W I T H C A N A D A

IMPORTS FROM CANADA

	YEAR 1986 Tons	YEAR 1986 ($000's)	NOVEMBER 1987 Tons	NOVEMBER 1987 ($000)	DECEMBER 1987 Tons	DECEMBER 1987 ($000)	Annual Rate Y-T-D 1987 Tons	% Change From same Period Last Year
Pulpwood, Roundwood (in cords of 128 cubic feet)	59,498	4,224	4,867	655	2,148	454	15,382	-74.1
Pulpwood chips	723,257	19,488	68,798	2,197	66,318	1,787	681,147	-32.6
Wood Pulp, Total	3,949,414	1,422,180	368,984	166,436	354,274	161,306	4,328,116	9.4
Waste Fibrous Materials, Total	157,878	27,196	17,851	3,745	17,531	3,461	186,286	18.9
Paper, Board & Products, Total	9,963,686	6,467,761	891,348	447,571	834,189	419,911	10,588,847	6.3
Paper, Paperboard,Wet Machine Bd. & Constr. Paper & Bd.	9,842,154	4,268,828	877,994	424,891	822,966	401,618	10,441,472	6.1
Paper, Paperboard & Products	9,715,710	4,193,592	875,616	442,813	821,312	415,845	10,365,412	6.7
Paper & Paperboard, Only	9,594,378	4,194,651	862,262	419,333	810,169	397,564	10,218,838	6.5
Paper, Total	9,367,388	4,138,464	842,298	412,528	786,274	389,474	9,961,198	6.3
Newsprint	8,269,333	3,556,983	728,265	347,455	669,259	323,506	8,588,389	3.9
Printing, Writing & Rel. Pap.	868,628	457,685	94,374	53,462	94,598	52,970	1,111 641	28.9
Pack. & Ind. Conv. Paper	182,481	81,492	19,782	8,317	17,829	9,812	215,514	18.1
Special Industrial Paper	4,766	7,893	518	889	491	983	5,478	14.9
Tissue Paper	42,173	26,411	3,358	2,415	4,284	3,842	48.257	-4.5
Paperboard, Total	226,998	64,187	19,972	6,805	23,895	8,090	257,639	13.5
Convtd Paper&Paperbd Products	121,332	198,941	13,354	23,480	11,143	18,281	146,575	20.8
Wet Machine Board	2,332	1,578	296	198	189	110	2,898	23.9
Construction Paper & Board	245,444	72,599	15,436	4,561	12,617	3,969	219,744	-10.5

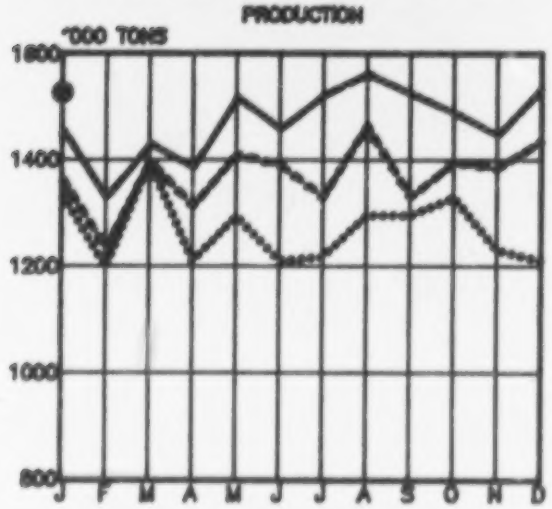
EXPORTS TO CANADA

Pulpwood, Roundwood (in cords of 128 cubic feet)	39,191	2,201	0	0	1,959	88	12,617	-67.8
Pulpwood chips	262,844	11,577	2,218	174	2,227	175	61,575	-76.6
Wood Pulp, Total	262,353	76,591	14,987	6,372	11,718	5,125	198,921	-24.2
Cotton Pulp & Other Pulp	33,629	10,458	1,872	1,112	8,191	1,962	58,288	73.3
Waste Paper	226,215	23,254	23,214	2,564	31,389	3,620	286,899	26.8
Paper, Board & Products, Total	725,421	464,684	83,544	53,988	77,488	51,941	957,434	32.0
Paper, Paperboard,Wet Machine Bd. & Constr. Paper & Bd.	578,635	315,718	66,282	37,616	59,189	34,532	712,494	24.9
Paper, Paperboard & Products	695,561	452,129	80,665	52,788	75,868	50,744	928,755	32.6
Paper & Paperboard, Only	548,775	383,154	63,483	36,416	56,777	33,335	675,815	25.8
Paper, Total	278,911	288,168	26,932	23,844	24,665	23,114	297,585	6.7
Newsprint	6,848	4,457	197	197	274	268	4,525	-25.1
Printing, Writing & Rel. Pap.	121,167	99,488	15,278	12,719	13,387	12,466	151,716	29.2
Pack. & Ind. Conv. Paper	25,614	16,467	1,982	1,578	2,433	1,434	25,826	0.8
Special Industrial Paper	122,874	75,189	8,962	8,767	8,378	8,458	110,187	-10.4
Tissue Paper	3,217	4,577	592	591	281	498	5,411	68.2
Paperboard, Total	261,864	182,986	36,472	12,572	32,112	10,221	378,210	44.4
Convtd Paper&Paperbd Products	154,786	148,975	17,262	16,372	18,291	17,409	244,968	58.2
Wet Machine Board	18,728	4,638	797	396	589	241	18,212	-4.8
Construction Paper & Board	19,132	7,918	2,882	884	1,912	956	26,467	38.3

SOURCE: Bureau of Census, Department of Commerce . E - Estimate of tonnage based on square foot data 19-Feb-88

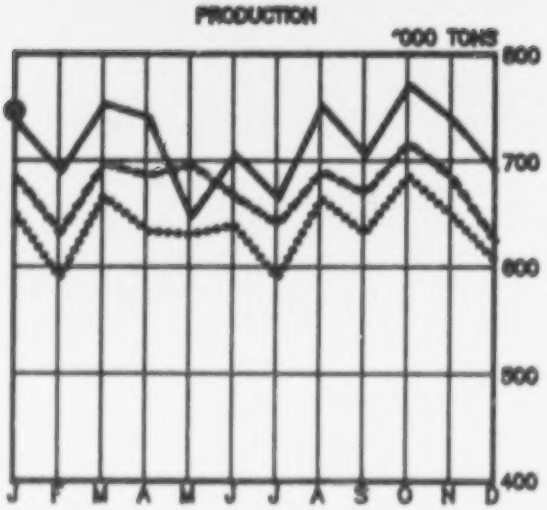
UNBLEACHED KRAFT LINERBOARD

PRODUCTION



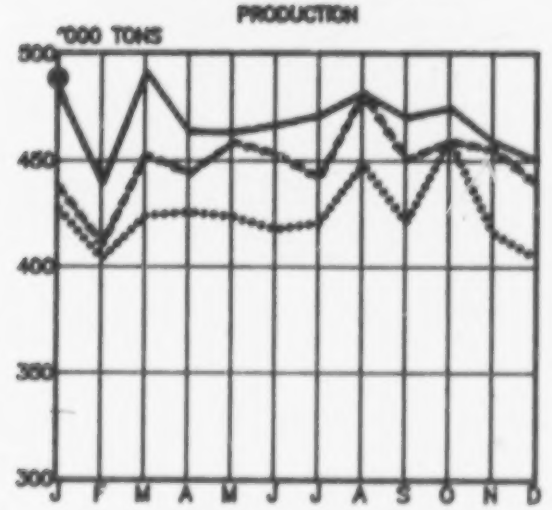
RECYCLED PAPERBOARD

PRODUCTION



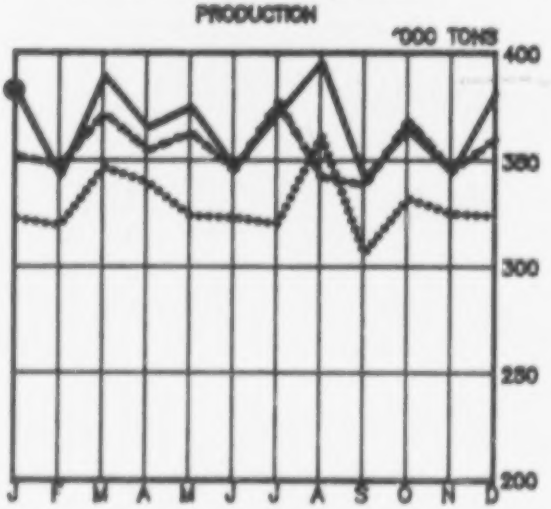
SEMICHEMICAL PAPERBOARD

PRODUCTION



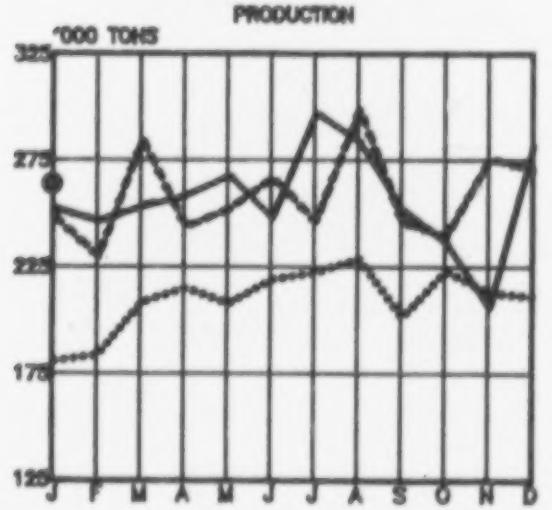
SOLID BLEACHED PAPERBOARD

PRODUCTION



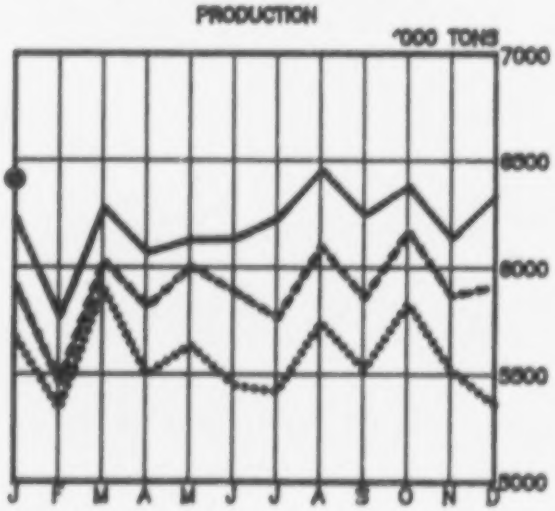
PAPERBOARD FOR EXPORT

PRODUCTION



TOTAL PAPER AND PAPERBOARD

PRODUCTION



● = JAN. '88 1986 ····· 1986 -·-·-·1987 ——

I M P O R T S

	YEAR 1986 Tons	YEAR 1986 $000	1987 NOVEMBER Tons	1987 NOVEMBER $000	1987 DECEMBER Tons	1987 DECEMBER $000	(1) Annual Rate YTD 1987 Tons	% Change from same Period Last Year
Pulpwood Roundwood (cords)	68,850	4,563	4,867	655	2,748	454	19,432	-74.64
Pulpwood Chips	724,828	19,642	63,276	2,244	66,388	1,728	525,629	-27.48
Total All Imports	16,722,494	7,674,736	1,594,937	822,986	1,461,792	775,851	17,817,151	6.55
Wood Pulp Total	4,581,768	1,601,378	401,228	181,855	414,551	188,932	4,858,238	5.86
Waste Paper	99,313	11,182	13,442	2,333	13,238	2,138	127,398	28.28
Other Fibrous Materials	184,969	26,326	5,629	2,893	5,529	2,074	76,491	-27.13
Paper Board & Products Total	11,936,452	6,035,850	1,134,638	636,625	1,028,473	582,715	12,763,824	6.92
Paper Paperboard Wet Machine Bd. & Construction Paper & Board	11,346,545	5,247,129	1,101,717	556,264	997,818	588,668	12,361,465	7.86
Paper Ppbd & Prds ex Cnst&WMB	11,596,888	5,928,457	1,112,737	629,176	1,089,847	576,446	12,455,575	7.39
Paper & Paperboard Only	11,286,991	5,139,735	1,079,816	549,514	978,392	502,591	12,052,817	7.54
Paper Total	10,925,453	5,051,917	1,050,850	537,809	949,758	492,277	11,691,186	7.01
Newsprint	8,587,587	3,682,351	776,615	368,142	718,846	341,072	8,986,548	4.65
Printing & Writing	2,029,382	1,179,882	245,078	148,788	211,377	138,963	2,349,436	15.78
Uncoated Groundwood	1,028,231	531,149	126,483	68,173	104,753	55,937	1,269,774	23.49
Coated Print.& Impreg. Pap.	501,382	359,495	65,823	47,414	62,135	45 647	613,751	22.41
Uncoated Free Sheet	453,638	254,627	49,056	30,210	40,897	26,291	417,395	-7.99
Uncoated Book	223,798	126,278	21,217	12,878	11,498	7,537	210,624	-5.89
Writing and Similar Paper	229,841	128,349	27,838	17,331	29,497	18,754	206,771	-10.04
Thin (except Cigarette)	45,351	33,831	3,576	2,856	3,529	3,018	47,567	4.89
Bristols	788	788	143	128	63	78	958	35.76
Total Pkg & Other Paper	242,571	146,212	22,373	15,623	23,614	16,479	297,882	22.47
Unbleached Kraft Paper	115,998	42,658	11,109	4,983	11,912	5.378	168,428	46.44
Other Pkg. & Indust. Paper	127,562	103,562	11,263	10,640	11,702	11,189	128,662	0.86
Tissue	66,873	43,552	6,784	5.263	4,722	3,763	58,121	-12.04
Paperboard, Total	281,448	87,818	28,966	11,785	28,634	10,314	360,831	28.20
Test or Containerboard	78,963	25,596	6,387	2,665	7.676	3,154	88.981	3.74
Semi-Chemical Corrugating	99,962	22,892	10,453	2,947	13,591	3,891	128,636	29.85
Other Paperboard	104,324	40,130	12,126	6.892	7,367	3,269	151,214	44.95
Convtd Paper&Paperbd Products	389,987	738,721	32,921	79,662	31,456	73,855	401,559	2.99
Paper Products, Total	361,517	730,257	30,960	74,866	29,135	69,520	368,179	1.84
Paperboard Products, Total	28,398	58,464	2,861	5,596	2,321	4,334	33,380	17.58
Wet machine Board	3,235	2,925	359	254	203	147	3,463	7.04
Construction Paper & Board	336,489	184,848	21,543	7,196	18,423	6,122	305,985	-9.04
Notes								
Other: No Weight Avail. ($000)		212,338		13,558		15,616	201,453	-5.13
Total Imports Incl. Other($000)		7,887,074		836,464		791,466	9,245,853	17.22

E X P O R T S

	YEAR 1986 Tons	YEAR 1986 $000	1987 NOVEMBER Tons	1987 NOVEMBER $000	1987 DECEMBER Tons	1987 DECEMBER $000	(1) Annual Rate YTD 1987 Tons	% Change from same Period Last Year
Pulpwood, Roundwood (cords)	42,198	2,373	0	0	3,639	147	16,178	-61.65
Pulpwood Chips	2,428,333	170,822	232,481	17,517	272,691	28,851	2,546,467	4.86
Total All Exports	13,851,152	4,685,447	1,214,875	458,986	1,459,414	681,457	14,797,437	13.38
Wood Pulp,Total	4,458,312	1,662,466	364,533	174,981	526,543	256,368	4,889,331	9.67
Cotton Pulp and Other Pulp	157,452	73,588	12,837	7,983	19,365	9,481	182,881	15.59
Waste and Old Paper	3,748,711	411,876	428,467	52,699	444,888	54,287	4,422,139	17.96
Paper, Board & Products,Total	4,686,677	2,539,485	409,038	255,483	468,618	281,489	5,303,966	13.17
Paper,Paperboard,Wet Machine Bd. & Construction Paper & Board	4,168,179	1,853,616	348,199	183,973	485,847	218,498	4,578,778	10.86
Paper, Ppbd & Prod ex Cnst&WMB	4,592,635	2,487,587	397,917	249,697	460,487	276,888	5,196,613	13.15
Paper & Paperboard, Only	4,066,137	1,801,718	337,278	178,266	397,636	205,817	4,471,418	9.97
Paper, Total	883,689	642,597	77,108	69,548	84,282	73,925	921,397	4.27
Newsprint	392,228	194,549	27,378	19,175	29,972	19,942	339.773	-13.37
Printing & Writing	190,656	185,271	23,018	22.337	22,629	22,684	249,892	30.65
Uncoated Groundwood	48,847	28,947	5,402	3,782	4,747	3,614	95.841	36.71
Clay Coated Paper	78,248	57,856	10,113	7.571	9.313	6.987	108.839	28.87
Uncoated Free Sheet	59,148	71,354	5,712	8,859	6,871	9,791	67,858	35.34
Other Printing & Writing	21,420	27,114	1,792	2,126	1,699	2,372	24,554	14.63
Total Pkg. & Other Paper	284,848	241,426	23,995	25,723	27.988	28,388	294,201	3.57
Unbleached Kraft	78,248	32,889	7,651	3,287	10.384	4.786	89,194	13.99
Other Pkg. & Indust. Paper	205,800	209,417	16,344	22,436	17,684	23,594	205,007	-0.39
Tissue	16,758	21,351	2,725	2,313	3,693	2,918	38,332	128.74
Paperboard, Total	3,182,448	1,159,121	260,170	108,718	313,354	131,893	3,550,021	11.55
Solid Wood Pulp	2,982,973	1,074,964	230,961	98,344	283,557	122,381	3.218,952	7.91
Total Linerboard	2,177,420	635,749	162,610	60,743	203,931	74,603	2,296,633	5.47
Bleached Kraft Linerboard	133,787	51,440	15,265	7.964	16,480	6.856	102,266	-23.56
Unbleached Kraft Linerbd	2,043,633	584,301	147,345	53,679	187,451	67.747	2,194,367	7.38
Other Unbleached Kraft	197,614	97,548	17,747	6.564	14,023	5.314	218,566	33.60
Other Bleached Kraft	571,298	359.954	46,179	29,342	62,145	41,161	647,883	13.39
Semi-Chemical Corrugating	76,641	21,713	4,426	1,695	3,458	1,384	63,951	-16.56
Recycled Paperboard	199,476	84,157	29,289	10,374	29,797	9,512	331,069	65.97
Convtd Paper&Paperbd Products	526,497	685,789	60,639	71,431	62,771	78,991	725,196	37.74
Paper Products, Total	240,171	456,429	24,131	46,198	27,757	45,465	301,282	25.41
Paperboard Products, Total	286,327	229,360	36,509	25,248	35.014	25,526	423,994	48.08
Wet Machine Board	18,893	7,259	1,988	518	878	432	17,328	-8.28
Construction Paper & Board E	75,149	44,619	18,811	5,197	7,311	4,248	98,824	19.79
Notes								
Other. No Weight Avail. ($000)		7,298		886		676	8.037	10.13
Total Exports Incl. Other($000)		4,692,745		491,712		682,133	6,815,855	28.19

SOURCE: Bureau of Census, U.S. Department of Commerce. E - Incl. estim. of tonnage based on square foot data.
(1) Annual Rate Year-To-Date is in tons unless otherwise specified in item description.

PRODUCER PRICE INDEXES
1967 = 100

	1986	1987	OCTOBER 1987	NOVEMBER 1987	DECEMBER 1987	JANUARY 1988	Annual Rate Y-T-D 1987	% Change from same Period Last Year
Pulp, Paper and Products except Building Grades	293.9	312.3	319.0	320.1	321.0	324.8	324.8	7.1
Pulp Paper & Products, ex. Building Grades & ex Waste Paper *	295.9	313.9	320.5	321.7	322.6	326.3	326.3	6.9
Total Wood Pulp	358.7	423.2	445.2	445.9	448.8	457.1	457.1	15.1
Total Paper	306.3	319.2	324.9	327.1	328.3	338.0	338.0	7.2
Total Paper, exc. Newsprint	300.4	307.5	314.1	316.2	318.3	328.6	328.6	6.3
Newsprint	326.1	354.5	368.4	369.9	368.8	396.6	396.6	16.5
Total Paperboard	271.6	301.0	310.8	311.3	312.8	312.8	312.8	7.7
Total Paper and Paperboard *	295.4	313.5	320.5	322.1	323.4	330.1	330.1	7.4
Converted Products	289.3	303.3	308.1	309.4	309.7	311.6	311.6	5.3
Waste Paper	172.8	220.3	232.5	225.4	227.7	233.9	233.9	20.2
All Commodities	299.8	308.6	311.4	311.9	311.7	312.9	312.9	4.0
Industrial Commodities	312.1	320.1	324.9	325.4	325.3	327.9	327.9	4.6

SOURCE: Producer Price Indexes: Bureau of Labor Statistics, U.S. Department of Labor * Computed by API

Paper and Allied Products Companies

Sales and Earnings

	Sales			Net Profit After Taxes			Earnings/Sales	
	1987	1986	Change 87/86	1987	1986	Change 87/86	1987	1986
	(Million Dollars)		%	(Million Dollars)		%	%	%
27 Paper and Allied Products Companies								
First Quarter	13,598	10,970	24.0	747.0	416.8	79.2	5.5	3.8
Second Quarter	14,721	11,722	25.6	946.6	605.1	56.4	6.4	5.2
Third Quarter	15,223	12,325	23.5	1,025.0	649.8	57.7	6.7	5.3
Fourth Quarter	15,694	13,609	15.3	1,062.7	659.9	61.0	6.8	4.8
Full Year	59,236	48,627	21.8	3,781	2,332	62.2	6.4	4.8
4 Forest Products Companies								
First Quarter	3,996	3,307	20.8	204.9	80.8	153.5	5.1	2.4
Second Quarter	4,459	3,897	14.4	279.2	182.5	52.9	6.3	4.7
Third Quarter	4,889	3,792	28.9	293.8	185.7	58.2	6.0	4.9
Fourth Quarter	4,597	3,696	24.4	279.9	185.7	50.7	6.1	5.0
Full Year	17,941	14,691	22.1	1,058	634.8	66.6	5.9	4.3

gain in sales and a 50.7% gain in earnings. Their 1987 totals showed a 22.1% gain in sales and a 66.6% gain in earnings. The 1987 ratio of total after-tax profits to total sales was 5.9%, compared to 4.3% in 1986.

The lower table on page 10 presents 1986-1987 quarterly and annual totals of the sales and after-profits data for the paper and forest products companies. The table also presents the percentage changes from year-ago levels and the sales margins for each of the time periods shown.

HISTORICAL PROFILE OF KEY PAPER INDUSTRY DATA SERIES

The table on page 12 of this report provides historical background for key paper industry-related data series that regularly appear in the yellow Industry Data Sheet. More specifically, the table includes data for 1977 and 1982 through 1987.

Total production of paper and paperboard (shown on the top line of the table) grew at an average annual rate of 2.8% between 1977 and 1987, while consumption of paper and paperboard (production plus imports less exports) increased an average of 3.0% a year over the same ten-year period. The slightly faster growth performance recorded by consumption reflected an increase in imports relative to exports, particularly during the years 1983-85. Imports advanced less rapidly than exports in 1986 and 1987. Both production and consumption of paper and paperboard outpaced real GNP, which grew at an average yearly rate of 2.6% between 1977 and 1987.

Operating rates for the paper grades averaged 91.6% of capacity between 1982 and 1987, which nearly matched the 91.4% average yearly operating rate posted by paperboard. However, operating rates for paperboard have been more volatile than those for the paper. For instance, the recent low for paperboard operating rates was 82.1% in 1982; the low for paper, which also occurred in 1982, was 87.2%. The recent peak annual operating rate for paperboard capacity was 96.9% in 1987; the recent peak for paper was 93.9% and also came in 1987.

The second tier of the table reports market pulp production, which grew at an average annual rate of 5.4% during the last ten years, much faster than total wood pulp production, which recorded an average growth rate of 2.5% a year. The industry's consumption of waste paper rose at a 2.9% average yearly rate during the past decade.

Other important information included in the table on page 12 include demand indicators for paper and board, and data series pertaining to employment, productivity, sales, earnings, newsprint, fibre boxes, and national economic trends.

Continued on page 12

PAPER AND PAPERBOARD -- Tons (000)	1977	1982	1983	1984	1985	1986	1987
Total Production (API).....: excluding :...	56,656	59,300	64,964	68,468	67,030	70,885	74,439
:construction:...							
Imports (including Products).: and wet :..E	7,294	7,603	8,509	10,576	11,106	11,597	12,454
Exports (including Products).: machine :..E	3,171	4,187	4,502	4,310	4,003	4,593	5,197
Apparent Consumption.....: grades :...	60,779	62,716	68,971	74,734	74,133	77,889	81,696
Paper Production % Tonnage Capacity.....	92.9	87.2	91.9	92.8	90.5	93.3	93.9
Paperboard Production % Tonnage Capacity.....	90.0	82.1	90.8	94.6	90.0	93.8	96.9
IMPORTS.....:Including Construction and :...	7,432	8,024	8,986	11,075	11,521	11,936	12,763
EXPORTS.....: WMB Grades (excl. HPB) :...	3,230	4,246	4,569	4,387	4,077	4,687	5,304
MARKET WOOD PULP PRODUCTION - Tons (000).....	4,820	5,732	6,526	6,899	6,800	7,583	8,128
TOTAL WOOD PULP PRODUCTION - Tons (000).....	46,648	48,706	52,454	55,471	54,147	57,017	59,582
WOOD PULP IMPORTS - TONS (000).....	3,864	3,656	4,093	4,490	4,466	4,582	4,850
WOOD PULP EXPORTS - TONS (000).....	2,640	3,395	3,644	3,594	3,791	4,458	4,889
RAW MATERIALS CONSUMPTION - Tons (000)							
..PAPER AND BOARD MILLS : excluding :							
Wood Pulp.....:consumption for:.....	45,805	48,081	51,422	54,994	55,047	56,320	58,774
Waste Paper.....:construction & :.....	14,058	13,565	14,896	15,926	15,623	17,935	18,667
TOTAL.....: WMB grades :.....							
PULPWOOD CONSUMPTION Cords(000)Amer.Pulpwd. Assn	73,970	76,257	85,442	87,646	85,744	91,434	93,946
EMPLOYMENT (000)							
Paper and Allied Products.....Total.....	691.6	662.4	661.2	680.9	677.7	674.3	678.6
Pulp, Paper and Board Mills.....Total.....E	272.3	258.9	256.2	257.2	252.3	248.5	246.2
AVERAGE HOURLY EARNINGS OF PRODUCTION WORKERS ($)							
Paper and Allied Products.....	5.96	9.32	9.93	10.41	10.82	11.14	11.4
Pulp, Paper Mills.....E	6.75	10.87	11.70	12.43	13.11	13.58	14.0
Paperboard Mills.....E	6.94	11.11	12.11	12.99	13.60	14.01	14.3
CAPITAL EXPENDITURES, PAPER & ALLIED PRODUCTS (Rept. by US Dept. of Com., Ann. Rates, Bill.$)	3.48	5.60	5.92	7.21	8.59	8.77	8.96-Y
INDEX OF OUTPUT PER MAN-HOUR (1977=100).....							
:IN PULP, PAPER :...Production Workers.....	100.0	113.7	121.4	124.0	123.6	131.2	139.5
:AND BOARD MILLS:...All Employees.....	100.0	111.3	119.6	121.9	122.1	130.4	137.4
PAPER AND ALLIED PRODUCTS (Million $)							
Industry Shipments (Dept. of Commerce).....	52,086	79,896	84,589	94,813	93,413	103,834	118,882
Pulp, Paper and Paperboard.....	22,303	33,636	36,071	41,384	39,173	46,990	51,547
Inventories (End of Period) - Total Industry...	5,642	8,969	9,263	10,128	9,908	10,430	11,282
Pulp, Paper and Paperboard.....	2,099	3,503	3,440	3,822	3,828	4,105	4,289
Sales (Corporations Only).....	45,750	60,293	65,008	71,891	71,465	7,484	85,148 *
Earnings (Corporations Only).....	2,367	1,460	2,327	3,015	2,880	3,820	4,847 *
Depreciation (Corporations Only).....	1,663	2,379	2,607	2,798	3,099	3,389	3,841 *
Net Worth (Corporations Only).....	19,704	26,705	27,219	28,160	29,694	31,221	33,843 *
PRICE INDEXES (Bureau of Labor Stats)1967=100							
Pulp, Paper & Products, ex. Building Grades....	187.3	273.2	271.4	293.3	292.0	293.8	312.3
Wood Pulp.....	281.1	379.0	346.9	397.6	346.6	358.8	424.7
Waste Paper.....	187.2	128.8	201.2	240.1	148.8	172.8	220.6
Paper.....	194.3	286.3	282.0	302.9	303.4	306.3	319.1
Paperboard.....	176.2	254.9	250.9	281.5	274.6	271.6	300.9
PAPER DEMAND (INDEXED: 1977=100)							
Total Paper Production	100.0	109.1	118.4	124.3	122.8	127.9	133.0
Paper New Supply	100.0	107.3	117.8	127.6	128.7	133.6	140.2
Demand Indicators - (Weighted Average)	100.0	114.5	122.2	134.8	140.7	147.5	154.4
Production of Nondurable Goods ....(21.2%).	100.0	105.5	113.7	122.2	125.3	130.6	136.7
Disposable Income .....(23.9%)	100.0	109.4	112.8	119.5	123.0	128.0	129.5
Total Printing and Publishing ....(54.9%).	100.0	120.2	129.6	146.4	154.3	162.5	172.0
Trend Factor	Not Available						
PAPERBOARD DEMAND (INDEXED: 1977=100)							
Total Paperboard Production	100.0	100.4	111.1	117.6	114.3	122.0	129.2
Production for Domestic Use	100.0	97.4	107.5	115.4	112.8	118.9	126.5
Demand Indicators - (Weighted Average)	100.0	101.0	107.9	118.1	120.1	122.0	128.9
Production of Consumer Goods ....(62.06%)	100.0	101.4	109.3	118.0	120.5	124.4	127.8
Production of Equipment ....(5.75%)	100.0	120.2	121.7	140.5	146.4	142.8	148.8
Production of Materials ....(32.19%)	100.0	96.7	102.8	114.2	114.5	113.9	118.1
Trend Factor	Not Available						
NEWSPRINT MARKETS							
Consumption by Publishers - Tons (000).....	10,230	11,144	11,674	12,603	12,773	13,158	13,552
Newspaper Pub. and Printing Empl. Total(000)...	396	419	426	440	454	461	461
PRINTING AND FINE PAPER MARKETS							
MAGAZINE ADVERTISING PAGES (PIB, Inc.).....	105,389	121,617	141,859	157,798	155,545	154,317	155,126
WHOLESALERS SALES AND INVENTORIES (Million $)							
Total Paper & Pap. Prdcts.,ex Wallpaper..Sales	N.A.	25,937	28,617	34,473	36,798	40,521	47,179
Inventories (End of Period).	N.A.	2,211	26,732	2,951	3,267	3,552	3,780
FIBRE BOX DATA (Fibre Box Association)							
Fibre Box Shipments (Million square feet).....	227,198	235,185	252,539	267,547	267,451	283,921	297,431
Container'bd Inventory at Mill & Plant(000Tons).	2,437	2,584	2,437	2,882	2,549	2,238	2,492
RETAIL TRADE (Million $)							
Total Retail Sales	722,489	1,069,278	1,171,191	1,289,373	1,379,621	1,454,411	1,507,134
Nondurable Goods Stores Sales	473,073	731,247	773,260	821,993	861,640	886,354	923,730
GENERAL ECONOMIC DATA							
TOTAL INDUSTRIAL PRODUCTION (INDEX 1977 = 100)...	100.0	103.1	109.2	121.4	124.2	125.1	129.8
PRODUCER PRICES(ALL COMMODITIES)(INDEX 1967=100).	194.2	299.2	302.8	310.3	308.7	299.8	307.6
CONSUMER PRICES (ALL ITEMS) (INDEX 1967 = 100)...	181.5	289.1	298.4	311.1	322.2	328.4	340.4
TOTAL CONSUMER CREDIT OUTSTANDING - (Billion $)..	223	332	380	453	531	586	621
GROSS NATIONAL PRODUCT - ANNUAL RATE (Billion$)..							
G.N.P. or Expenditure - Current $.....	1,991	3,166	3,406	3,772	4,010	4,235	4,488
G.N.P. or Expenditure - 1982 $.....	2,959	3,166	3,279	3,501	3,607	3,713	3,820

Note: Wood Pulp Production excludes def., explo. & scrngs.
* First Three Quarters at Annual Rate